

**EXHIBIT A**

Presentation from Interview of September 11, 2008

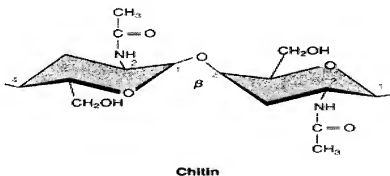
## **Chitin Micro particles (CMP)**

***a new class of immune enhancer  
for treating respiratory allergies  
and infections***

Peter Strong, PhD  
CMP Therapeutics Ltd

## CMP (chitin microparticles)

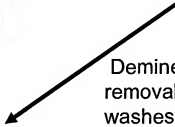
- Chitin is a linear polymer of N-Acetyl-D-Glucosamine.
- Chitin is the second most abundant polysaccharide after cellulose.
- Chitin is a major structural component of arthropod exoskeletons AND fungal spore capsules.



## ***Chitin Microparticles (CMP)***



Shells



Demineralization / protein  
removal by mild acid/alkali  
washes.  
Milling.



CMP (chitin microparticles, average <10 $\mu$ m)

***A nasal spray containing chitin microparticles  
(CMP) enhances local nasal immune protection  
against allergies and infections***

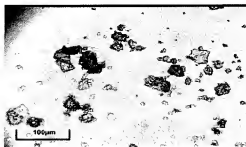


Local treatment stimulates the nasal innate immune system through secretion of many chemicals specific to the nose that enhance protection by providing a nasal 'immune barrier'.

**CMP**

***Mechanism of Action***

**CMP resembles fungal spores - *both contain chitin  
and both are similar in size***



CMP stimulates the same type of protective innate immune response in the nose, which enhances local protection against infection and allergic rhinitis

## **CMP stimulates immune cells the nasal epithelium**

Nasal passages



Nasal immune cells are adapted to recognize fungal spores and are very efficient at capturing CMP particles



CMP-stimulated cells interact with other cells of the nasal immune system

↓ ↓ ↓  
Local secretion of cytokines produces local changes in nasal mucosa that enhances protection against allergic rhinitis and infection



***Application of CMP to the nose exerts local beneficial effects in nasal mucosa producing an 'immune barrier'***



IL-12, IFN $\gamma$ , sIgA, SP-D, Collectins, Defensins...

- Reduces nasal secretion of allergy-inducing Th2 cytokines
- Reduces mucus secretion and changes composition to provide a thicker barrier
- Reduces inflammation of nasal tissue
- Reduces infiltration of inflammatory cells
- Reduces constriction of nasal passages

## **In vivo Experimental Support Data**

***CMP is effective in mouse allergy models***

- Mice are sensitized by i.p. injections over 4 weeks
- Mice are challenged by intranasal delivery of allergen
- CMP or control is given intranasally 1-2hr after allergen challenge
- Challenge and treatment are repeated for 3-5 days after which airway reactivity and allergic response is assessed

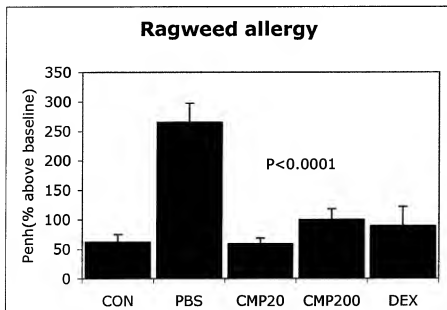
(Strong et al Clin. Exp. Allergy 2002)

**Improved lung function - *the best test.***  
**Whole body plethysmograph measures enhanced**  
**pause (Penh) which is elevated in asthma**



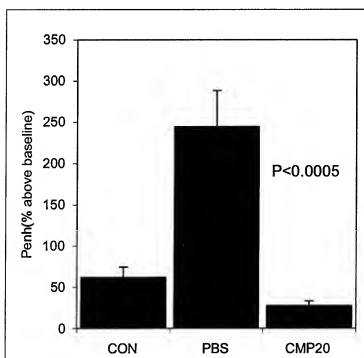
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**Anti-asthmatic effect of intranasal CMP in Ragweed Pollen Allergy (75% of hay fever sufferers in US)**



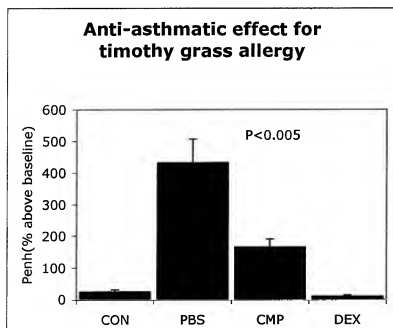
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### Anti-asthmatic effect of intranasal CMP in Bermuda Grass Pollen Allergy



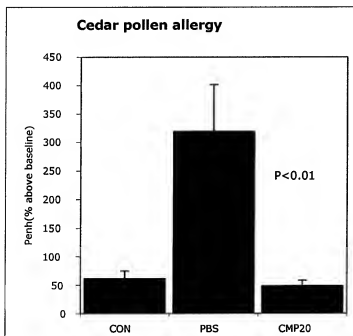
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**Anti-asthmatic effect of intranasal CMP in Timothy  
Grass Pollen Allergy (major pollen in US & EU)**



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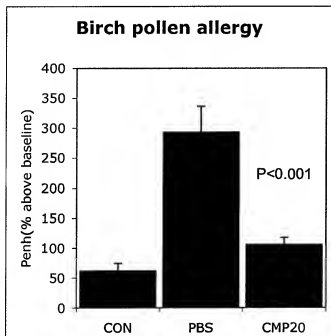
### Anti-asthmatic effect of intranasal CMP in Cedar Pollen Allergy (major cause of AR in Japan)



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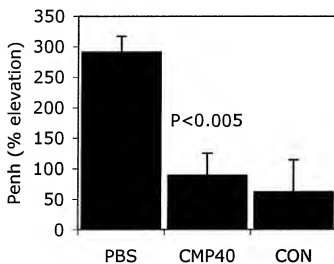
**Anti-asthmatic effect of intranasal CMP in Birch  
Pollen Allergy (major cause of AR in Europe)**



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### Anti-asthmatic effect of intranasal CMP in Cat Allergy

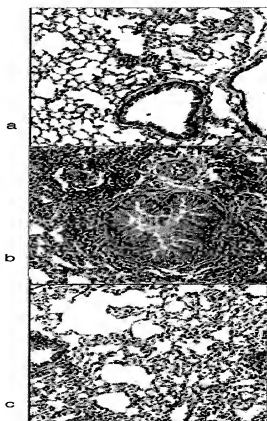
#### Cat allergic asthma



Treatment with  
40ug CMP given  
daily after  
allergen  
challenge.

Results: Day 4.

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## Lung histology -

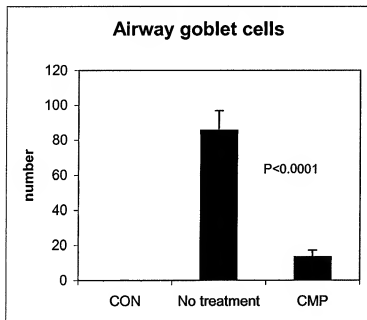
### ***another direct assessment of efficacy***

There is significantly less cellular infiltration and mucus plugging of airways in mice treated nasally with CMP (c) when compared to PBS treated mice (b).

(a)= non-sensitized mice

(Strong et al Clin. Exp. Allergy 2002)

**Local nasal treatment with CMP protects against proliferation of mucus secreting goblet cells**



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**The Invention Has Been Well-Received, Successful**

**➤ Numerous Peer Reviewed Articles**

**Academic Collaborations**

**Investor Due Diligence**

**Clinical Trials**

### **The Invention Patentably Distinguishes Over The Prior Art**

1. A method of **nasally** treating an allergy in a patient comprising **intranasally administering to the nasal mucosa** of the patient a therapeutically effective amount of **between 0.01 and 100 mg per kg of body weight of the patient of chitin microparticles** in a chitin microparticle (CMP) preparation **to stimulate cell-mediated immunity and anti-inflammatory responses in the nasal tissue**, wherein the CMP preparation comprises **chitin microparticles that are insoluble** in a pharmaceutically acceptable excipient or carrier and **have an average diameter of less than 10 $\mu$ m, and the allergy is seasonal respiratory allergies, allergies to aeroallergens, or asthma.**

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